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| 09/903,437 | 07/11/2001 | Hironobu Kiyomoto | 15115/005001 | 8917 |
| 22511 | 7590 | 01/11/2005 | EXAMINER | |
| OSHA & MAY L.L.P. 1221 MCKINNEY STREET HOUSTON, TX 77010 | | | LUU, THANH X | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2878 | |

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/903,437

Applicant(s)

KIYOMOTO ET AL.

Examiner

Thanh X. Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16,25 and 38-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16,25 and 38-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Office Action is in response to amendments and remarks filed November 12, 2004. Claims 16, 25 and 38-40 are currently pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 40 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 40, it is unclear what "thereof" refers to.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Harris (U.S. Patent 2,254,961).

Regarding claim 16, Harris discloses (see Fig. 18) an optical component, comprising: a transparent body having a reflective plane (at 86) and a curved reflective surface (at 89) which faces the reflective plane; a projection (at 88) provided at a center of the reflective plane; and a recess (at 87) provided on the curved reflective surface; wherein the curved reflective surface except the recess is covered with high reflective

material; the curved reflective surface indirectly receives light (rays 90) passing through the recess, and the reflective plane reflects incident light (rays 90) directly passing through the recess and passes the light (other rays) reflected by the curved reflected surface through the reflective plane.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris.

Regarding claim 40, Harris discloses the claimed invention as set forth above. Harris does not specifically a circuit board as claimed. However, it is notoriously well known in the art to mount light emitting elements on circuit boards for connection to other circuitry or to a power source. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a circuit board the apparatus of Harris to properly mount and power the device.

7. Claims 25 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harris in view of Perissinotto et al. (U.S. Patent 5,485,317).

Regarding claims 25 and 39, Harris discloses the claimed invention as set forth above. Harris does not specifically a transparent resin between the optical component and the light-emitting element and a plurality of optical components. Perissinotto et al. teach (see Figs. 2 and 3) a transparent resin (in cavity 21) as claimed and a plurality of

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optical components. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a resin and a plurality of components in the apparatus of Harris in view of Perissinotto et al. to fix the light-emitting element with respect to the optical element and provide brighter illumination.

8. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harris in view of Godbillion et al. (U.S. Patent 6,264,347).

Regarding claim 38, Harris discloses the claimed invention as set forth above. Harris does not specifically a fresnel lens shaped pattern as claimed. Godbillion et al. teach (see Fig. 4) a fresnel lens pattern is formed on a curved reflective surface in a similar device. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide such a fresnel lens pattern in the apparatus of Harris in view of Godbillion et al. to obtain a desired pattern of illumination.

Response to Arguments

9. Applicant's arguments filed November 12, 2004 have been fully considered but they are not persuasive.

Applicant asserts that the prior art does not disclose the curved reflective surface indirectly receiving light passing through the recess. Examiner disagrees. Figure 18 clearly shows the curved reflected surface (89) indirectly receiving light rays 90. Examiner reminds Applicant that when "comprising" language is used and the limitations are open-ended. Therefore, nothing in the claims preclude the curved reflected surface from also directly receiving light.

Applicant asserts that the prior art does not disclose a protrusion as claimed because there is no projection at the center of the "forward plane face." However, no such language is found in the claims. Applicant simply claims, "a projection provided at a center of said reflective plane." As understood, Figure 18 shows a projection (88) provided at a center of the reflective plane (at 86).

Thus, as set forth above, this rejection is proper.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for

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the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh X Luu
Primary Examiner
Art Unit 2878

01/2005